

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,967	12/09/2003	John Harvie Chaffin III	46872-292128	3674
7590 04/05/2006		EXAMINER		
Everman Law Firm, PA 6000 Fairview Road			TURNER, ARCHENE A	
Suite 1200			ART UNIT	PAPER NUMBER
Charlotte, NC 28210			1775	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Commons	10/730,967	CHAFFIN, JOHN HARVIE			
Office Action Summary	Examiner	Art Unit			
	Archene Turner	1775			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with t	ne correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICAT 36(a). In no event, however, may a reply to vill apply and will expire SIX (6) MONTHS cause the application to become ABAND	ION. e timely filed from the mailing date of this communication. DNED (35 U.S.C. § 133).			
Status		·			
1) Responsive to communication(s) filed on 12 January 2006.					
2a) This action is FINAL . 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	ix parte Quayle, 1935 C.D. 11	, 453 O.G. 213.			
Disposition of Claims					
4) ☐ Claim(s) 1-7 and 32-40 is/are pending in the ap 4a) Of the above claim(s) 40 is/are withdrawn from 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-7,32-39 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	rom consideration.				
Application Papers	, ·	•			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11).	epted or b) objected to by t drawing(s) be held in abeyance. on is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori	s have been received. s have been received in Appli ity documents have been rec i (PCT Rule 17.2(a)).	cation No eived in this National Stage			
	or the definited depices her reco				
Attachment(e)					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/05.	4) Interview Summ Paper No(s)/Ma 5) Notice of Inform 6) Other:				

Art Unit: 1775

1. Newly submitted claim 40 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: this claim belongs with group II drawn to a coated substrate, which was not elected

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 40 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7,32-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al (5,209,812) or Aida (5,225,275).

Wu et al or Aida disclose the claimed diamond film having very low graphite inclusion (see fig. 8 for '812 and fig. 5 for '275) within the claimed thickness. The claimed stress and roughness is considered inherent.

4. Claims 1-7,32-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Philips Patntverwaltung Gmbh (DE 3047888)

Art Unit: 1775

Philips Patntverwaltung Gmbh discloses a diamond film with the claimed thickness that has a lattice structure similar to diamond, which suggests the exclusion of graphite in the film.

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-4,6,32-33,36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruen et al (as before).

The rejection is maintained for reasons of record in the previous office action. Applicant's arguments filed 1/12/2006 have been fully considered but they are not persuasive. The applicant argues that because the reference includes hydrogen in the method that graphite is included in the final film. This is not found persuasive since other references that include hydrogen as a precursor show that the graphite in the diamond film is etched away from the final product, and thus the rejection stands. The applicant is reminded that the elected claims are product claims and when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product in a product by process claim, the burden is on the applicant to present evidence from which the examiner could reasonably conclude that the product differs in

Art Unit: 1775

kind from those of the prior art (*In re Brown*, 459 F. 2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F. 2d 742, 180 USPQ 324 (CCPA 1974)). This burden is NOT discharged solely because the product was derived from a process known to the prior art (*In re Fessman*, 489 F. 2d 742, 180 USPQ 324 (CCPA 1974)).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Archene Turner whose new telephone number is (571) 272-1545. The examiner can normally be reached on Monday, Wednesday through Friday from 10:30 am. to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Please remember to include on the fax, the art unit 1775, serial number and Examiner's name.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).